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# MATERIAL SAFETY DATA SHEET

# NIBAN®

## GRANULAR BAIT

**Health Emergencies: CHEMTREC® (800) 424-9300**

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Nisus Corporation
100 Nisus Drive
Rockford, TN 37853
(800) 264-0870 FAX: (865) 577-5825

Product Trade Name: **NIBAN® GRANULAR BAIT**
Product Class: Pesticide Bait
EPA Reg. No.: 64405-2
Active Ingredient: Boric Acid (5%)
CAS No.: 10043-35-3
Health Emergencies: CHEMTREC® 800-424-9300

### SECTION 2 - INGREDIENTS INFORMATION

This product contains 5% boric acid (other components are cellulose and food attractants) and is not classified as dangerous under the EC Directive 67-548/EEC and subsequent amendments.

### SECTION 3- HEALTH HAZARD INFORMATION

**EYE CONTACT:** Avoid dust contact with eyes. May cause physical eye irritation.
**SKIN CONTACT:** Not an irritant.
**INGESTION:** This material may be harmful if large quantities are swallowed.
**INHALATION:** Breathing dust may cause irritation of nose and throat.

### SECTION 4 - EMERGENCY AND FIRST AID PROCEDURES

**EYE CONTACT:** Flush eyes for at least 15 minutes with clean water. Seek medical attention if irritation persists.
**SKIN CONTACT:** Wash with soap and water.
**INGESTION:** A small amount of Niban (up to ½ pound) will not cause harm. If large amounts are ingested, induce vomiting and seek medical attention.
**INHALATION:** Remove victim to fresh air. Contact a physician if warranted.

### SECTION 5 - FIRE & EXPLOSION DATA

**FLASH POINT:** >451$^{O}$F
**EXTINGUISHING MEDIA:** $CO_2$ dry powder, universal type foam or water.
**FIRE AND EXPLOSION HAZARDS:** None (Organic dusts mixed with air can be explosive)
**FIRE FIGHTING PROCEDURES:** Burning product produces smoke, carbon dioxide and carbon monoxide. Self-contained breathing apparatus should be used as with wood or other cellulose.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**IN CASE OF SPILL OR LEAK:** Dispose of large quantities in approved landfill. Small quantities can be placed in trash.

### SECTION 7 – HANDLING AND STORAGE

Store in dry place.
**RESPIRATORY PROTECTION:** (Not normally needed) Dust mask, if dusting or moving large quantities and producing dust.
**VENTILATION:** Exhaust to ventilate. If used in confined areas, use dust mask.
**PROTECTIVE CLOTHING:** None.
**EYE PROTECTION:** Use dust goggles.
**OTHER PROTECTIVE EQUIPMENT**: None.

### SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Hazard Rating:** NFPA
**Health:** 0
**Fire:** 0
**Reactivity:** 0

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Brown, Granular Particles
**Specific Gravity:** 0.62
**Solubility in water:** N/A
**Volatile by weight:** Some slight loss of water is possible once opened.
**Odor:** None
**pH:** N/A

### SECTION 10 – STABILITY AND REACTIVITY

**STABILITY:** Stable
**CONDITIONS TO AVOID:** Do not dust in air or oxygen with an ignition source. Do not mix with oxidizing agent.
**HAZARDOUS POLYMERIZATION:** None
**HAZARDOUS DECOMPOSITION PRODUCTS**: On burning – carbon dioxide and carbon monoxide.

### SECTION 11 – TOXICOLOGY

Acute Oral $LD_{50}$ - Greater than 5000 mg/kg (estimated 60,000 mg/kg)
Acute Dermal $LD_{50}$ - Greater than 2000 mg/kg (estimated >40,000 mg/kg)
Dermal Irritation - Not a primary irritant
Dermal Sensitivity - Not a sensitizer.

Borates have been shown to have some chronic toxicity in animals fed high doses, similar to that of alcohol, but this has not been found in humans.

### SECTION 12 – ECOLOGICAL INFORMATION

Breaks down naturally in the environment to provide organic matter and boron micro nutrients.

**ECOTOXICITY DATA**

**General:** Boron occurs naturally in sea water at an average concentration of 5 mg B/l and fresh water at 1 mg B/l or less. In dilute aqueous solutions the predominant boron species present is undissociated boric acid.

**Algal toxicity:**

Green algae, *Scenedesmus subspicatus*
96-hr $EC_{10}$ = 24 mg B/l

**Invertebrate toxicity:**

Daphnids, *Daphnia magna* Straus
48-hr $LC_{50}$ = 530 mg B/l
21-day NORC_LOEC = 6-13 mg B/l

**Fish Toxicity:**

Sea water:
Dab, *Limanda limanda*
96-hr $LC_{50}$ = 74 mg B/l

Fresh water:
Rainbow trout, Salmo gairdneri (embryo-larval stage)
24-day $LC_{50}$ = 88 mg B/l
32-day $LC_{50}$ = 54 mg B/l

Goldish, *Carassius auratus* (embro-larval state)
7-day $LC_{50}$ = 65 mg B/l
3-day $LC_{50}$ = 71 mg B/l

**ENVIRONMENTAL FATE DATA**

**Persistence/Degradation:** Boron is naturally occurring and ubiquitous in the environment. Niban decomposes in the environment to natural borate.

## SECTION 13 – DISPOSAL CONSIDERATION

**DISPOSAL METHOD:** Dispose large quantities in landfill in accordance with federal, state and local regulations. Small quantities can be used as bait around homes or placed in household trash.

## SECTION 14 – TRANSPORT INFORMATION

**INTERNATIONAL TRANSPORTATION:** *Niban Granular Bait* has no UN Number, and is not regulated under international rail, road, water or air transport regulations.

## SECTION 15 – REGULATORY INFORMATION

**Chemical Inventory Listing:** Boric acid appears on several chemical inventory list under the U.S. EPA TSCA Inventory CAS No. 10043-35-03.

**General:** Ensure all national/local regulations for the safe handling of pesticides are observed.

## SECTION 16 – OTHER INFORMATION

**References:**

EPA Re-registration Eligibility Decision (RED), Boric Acid and its Sodium Salts, (1993) EPA 738-R-93-017

Borates Even Safer, According to EPA, (2004)

The active ingredient in small quantities is an essential micronutrient for plants and is considered probably essential for humans.

For general information on the toxicology of borates see ECETOX Technical Report No. 63 (1995); Patty's Industrial Hygiene and Toxicology, 4th Edition Vol. 11, (1994) Chap. 42, 'Boron'.

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